Onondaga County
Interoperable Communications System
Onondaga County Dept. Of Emergency Communications (911)
Functional Requirements Matrix

Requirement #	Requirement Description	Additional Information	Specification #
1	Ability for new system to integrate seamlessly with existing Motorola Gold Elite radio consoles		
2	Ability for two-way communications between field units and the 911 communications center from any location within Onondaga County. This must be available vehicle mounted radio and should be available from portable radio. Communications availability should include inside buildings, below grade, and basement areas.	This is also a requirement of EMO for the Emergency Operations Center	
3	Ability to monitor all channels at the 911 center at all times		
4	Ability for system to integrate with existing recording systems for storage and later playback in accordance with 911 policies and procedures on radio channel recording		
5	The 911 center **MUST** have 24/7 access to an answering point for any radio vendor involved with installation and maintenance of the radio system. That vendor should have trained technicians available to respond to the center/tower/other involved installation in a reasonable amount of time to solve problems that may arise.	If for any reason there is a problem with the radio system, the vender should have someone at the problem within an hour of the problem being reported.	
6	Training must be provided to 911 dispatch staff on the operation of any new radio system. This should include training on the system prior to any installation. This training should be provided by the manufacturer and/or the radio vender or a combination of both.	This would be similar to the training provided by Motorola and United Radio at the United Radio facility when we switched over to the Motorola Gold Elite consoles.	
7	Members of the 911 Training Office, 911 Technical Services Office, and select others should receive additional training on the system to fit with their job descriptions.	Training such as "train the trainer" should be provided as these persons will be training other employees.	

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8	911 Center supervisory staff should have additional training so that they are able to recognize a problem and contact the appropriate personnel	This would be important on the off hours when technical services staff are not in the building	
9	Any radio system must be able to fully function if the 911 Control Center is crippled or off line at anytime	The 911 control center has many redundant back up systems that would make this an unlikely event however, The system must be fully functional during the time the back up site is activated in the event of a 911 control center abandonment. This is also a requirement of EMO for the Emergency Operations Center	
10	Any radio system must be able to fully function if any tower site's) become disabled for any reason (i.e.. Natural disaster, power failure, tower falls over, etc.)	This is also a requirement of EMO for the Emergency Operations Center	
11	Any radio system must be identical in its operation both at the 911 center as well as the 911 back-up site	This is also a requirement of EMO for the Emergency Operations Center	
12	Adequate back up systems must be in place to ensure complete operation in the event of failure of various systems such as microwave, comparators, transmitters and receivers.	This is also a requirement of EMO for the Emergency Operations Center	
13	With the introduction of agency interoperability, there must be some type of security protocol protecting the integrity of radio communications within the same agency	A firefighter from agency B should NOT be able to talk on police channel x unless the controlling dispatcher "flips a switch". 911 center authorization needed for unified talk groups. This is also a requirement of EMO.	
14	Any new system should not be so large in scope that the current number of dispatchers can not safely control the units assigned to him/her	Having a greater number of channels is great but there is only 1 dispatcher for each area/zone. It is a proven fact that in many cases of firefighter lost situations, it's the dispatcher that hears the initial "call for help" There cant be so many channels that the dispatcher is overwhelmed with radio traffic	

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15	Ability to prioritize specific or major incidents in a trunked system	Local dog catcher should not be given priority over a fire/ems/police unit just because he pushed the PTT first	
16	Emergency signaling button on portable and mobile radios (signal 50)		
17	Emergency (signal 50) button activation to be given highest priority on system to ensure the signal is received immediately by the controlling dispatcher.		
18	Unit identification system to identify each mobile/portable when it is used	Unit ID's should be presented to the dispatcher in a plain English format rather than a code number that has to be looked up	
19	Ability to have a common talk groups assigned to all responding units across agency boundaries assigned by the controlling dispatcher.	The County Fire Chiefs Assn. requirements state under requirement 52.0 that they would like "responders to share information directly rather than relaying through the dispatcher. It would re-enforce that police, fire, and EMS are all on the same team!". I would like to emphasize that we as dispatchers are also on this team and that we **NEED** to be included in this information sharing process. This is also a requirement of EMO for the Emergency Operations Center	
20	All services required at an incident should have interoperability at the scene. Common talk groups should be assigned by the controlling dispatcher.	This should include Police/Fire/EMS as well as any other agencies needed at the scene such as Utilities, Red Cross, etc. This is also a requirement of EMO for the Emergency Operations Center	
21	Ability for Onondaga Fire Control to monitor frequencies of surrounding counties fire control centers (Oswego, Madison, Cortland, Cayuga)	At this time we have no means to monitor these surrounding counties even though we have units that operate in these counties on a regular basis. This leads to confusion and does nothing to alleviate the problems like the mentioned ice rescue on Oneida lake for example.	

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22	If possible it would be nice to have the ability to temporarily disable a mobile/portable that is "stuck open"	If this feature is available, it would prevent a unit from tying up a channel while the dispatcher "plays detective" to find the unit and advise them about the open mic. This can take days if it's in intermittent problem whereas if we could disable the unit from control it would prevent this problem. This would have to supervisory control.	
23	The controlling dispatcher should have the ability to break in on a transmission in an emergency situation or if the unit is "stuck open".	This is also a requirement of EMO for the Emergency Operations Center	
24	Any new system should allow us to have complete interoperatibility to allow communications with other ancillary agencies that we do not normally dispatch including, but not limited to the agencies at the right.	State/County/Local DOT/DPW, OCWA, City water, NIMO/NYSEG, codes departments, health departments, School security departments, Red Cross, CSX/other railroads, National Guard, Locally stationed Federal Offices (IE. FAA, FBI, DHS, TSA) This is also a requirement of EMO for the Emergency Operations Center	
25	With this new interoperability, there must be supervisory control to prevent unauthorized communications across agency lines unless there is specific need to do so as required by Command staff or because of an incident in progress.		
26	Any new radio system should be kept up to date with any new software updates etc. by the radio vendor.		
27	Any new radio system should have the capability to seamlessly interface with the Metropolitan Medical Response System (MMRS). This should be true for both the 500-M Base radio and the LPE-200 Portable radio	This is also a requirement of EMO for the Emergency Operations Center	

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28	Any new radio system should have the appropriate interface capabilities to allow for use with emerging technologies	We want to be able to keep up with emerging technologies such as Radio over Internet Protocol (ROIP), possible interface with Metro net, Etc. This is also a requirement of EMO for the Emergency Operations Center	
29	Any new radio system must have a provision to allow for use of current radio system including Police/Fire/EMS frequencies during the phase in/phase out period	We can not have a loss of communications during the installation and training period of the new system. This is also a requirement of EMO for the Emergency Operations Center	
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